



# NEVADA IRON LIMITED

ABN 98 123 423 987

31 July 2012

## QUARTERLY REPORT FOR THE PERIOD ENDED 30 JUNE 2012

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### HIGHLIGHTS

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- **Outstanding drill results, including 10.7m grading 53% total Fe**
- **Aggressive exploration programme completed**
- **Project optimisation being undertaken to increase project scope**
- **Substantial new geophysical targets identified**
- **Additional ground, with significant geophysical targets being acquired**
- **Appointment of high calibre US based Project Manager**

#### Overview

Nevada Iron Ltd (ASX Code: NVI) is an Australian based resource company focused on the development of the Buena Vista Iron Project located in northern Nevada, USA.

Buena Vista ore has proven to be significantly different to other magnetite ores in that the iron readily upgrades without the need for expensive fine grinding. The Company's metallurgical test work proving that even low grade Buena Vista ore upgrades, at a



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significantly coarser grind than typical BIF (taconite) magnetite ore, to produce high quality clean concentrate grading 67.5-69% Fe.

## **Corporate**

As part of the previously announced strengthening of the management team, Mr Mick McMullen has taken on the role of Executive Chairman with the primary responsibility of arranging financing for the development of the Buena Vista Iron Project.

The Company also recently employed a high calibre Project Manager; Mr Chris Tanner MBA BSc Eng (Civil). Chris has nearly two decades of experience in project design and development in the Americas (Nevada, Alaska, California, Texas, Argentina, Bolivia, and Mexico).

Mr Tanner will be responsible for building the development team that will take the Buena Vista Iron Project through scope finalisation, permitting and construction phases. Chris is establishing a project office in Reno, Nevada from which the development of the Project will be managed.

## **Buena Vista Iron Project**

### *Project Optimisation*

The Company is undertaking a review of the Buena Vista Iron Project for the purpose of increasing the scope of the project. The key components of this optimisation process are:

- increasing Phase 1 plant throughput from 4.8 Mtpa to a minimum of 6.0 Mtpa (and potentially higher);
- schedule mining of other deposits, in addition to the West deposit, in the initial years to increase concentrate production to levels of up to 2.4 Mtpa; and
- investigating the potential to develop a Phase 2 project, after a few years of operation, to produce in the order of 4 to 5 Mtpa of concentrate.

The optimisation process is designed to realign the processing throughput rate more closely to the ore mining rate, which on the current schedule is between 10 and 12 Mtpa of ore per annum.

To assist in more fully scoping the project, the Company committed to an aggressive exploration programme for the purpose of increasing and expanding the existing JORC resources and converting known higher grade exploration targets and prospects to JORC resources.



## *Exploration*

In support of the project's optimisation plan, an aggressive drilling programme was undertaken in the June 2012 Quarter to further test the Section 5 prospect and a number of other prospects with the goal of increasing the resource base to support the case for the future expansion of the project.

Two Schramm RC drills and an Atlas Copco diamond drill rig were utilised to:

- re-assess the previously reported magnetite mineralisation at Section 5;
- evaluate ground magnetic anomalies lying at West Extension to the immediate west of the West deposit;
- provide additional data on the West and South Central deposits; and
- provide geotechnical data for pit stability analysis.

During this programme, 80 RC holes were drilled for a total of 13,224 m and 19 diamond holes for a total of 3,431 m.

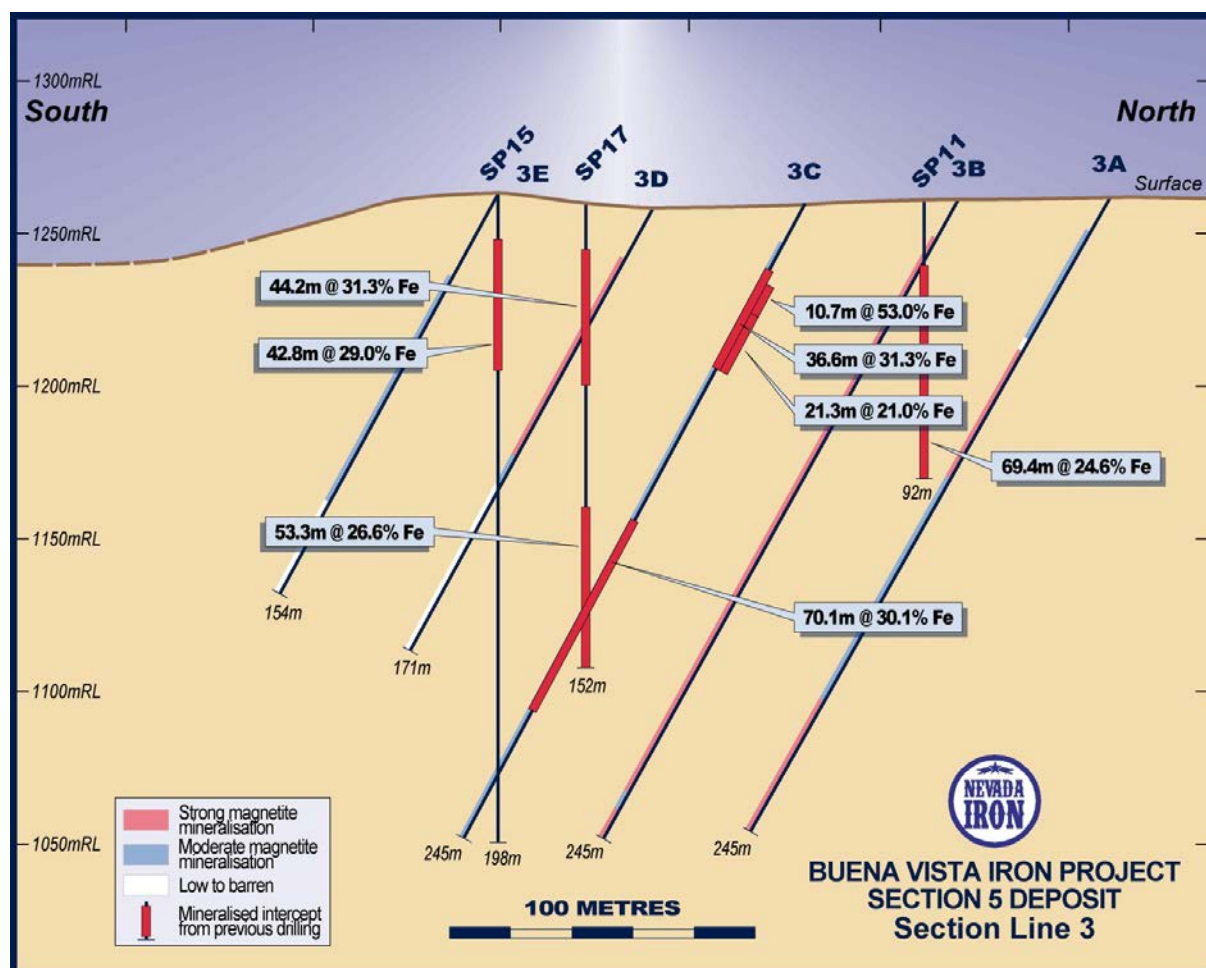
Section 5 contains previously identified magnetite mineralisation (Table 1) and was evaluated by 47 RC and 12 diamond holes on nominal 50 m x 50 m spacing. Estimates of magnetite content; based on susceptibility meter readings and visual estimates of magnetite content from geological logging; and receipt of preliminary assay data confirms the historical data that a core containing variably thick zones (Figure 1) of high grade mineralisation (350 m in length x 200 m in width) grading between 25-30% Fe exists at Section 5.

The near surface grades of plus 50% total Fe from RC hole 3C (Table 2) are considered to be very encouraging and illustrate the potential to define higher grade near surface mineralisation that can be mined early in the project life. Drill hole 3C is the first batch of assays received from the recent drill programme and has returned some outstanding near surface results including 10.7 m grading 53.0% total Fe within a broader envelope of 36.6 m grading 31.3% total Fe.

These results are illustrated in Figure 1 along with the historical drilling results and interpreted magnetite mineralisation (magnetic susceptibility readings and field estimates).



Figure 1: – Line 3, Section 5 Deposit



Geological logging of diamond core from Section 5 shows the mineralisation to be more homogenous than at the West deposit, and with some higher grade intersections extending to and beyond the limit of drilling at vertical depths of 200 metres below surface (refer Figure 1).

Further drill results from Section 5 are expected in the near term and will be released to the ASX when finalised.

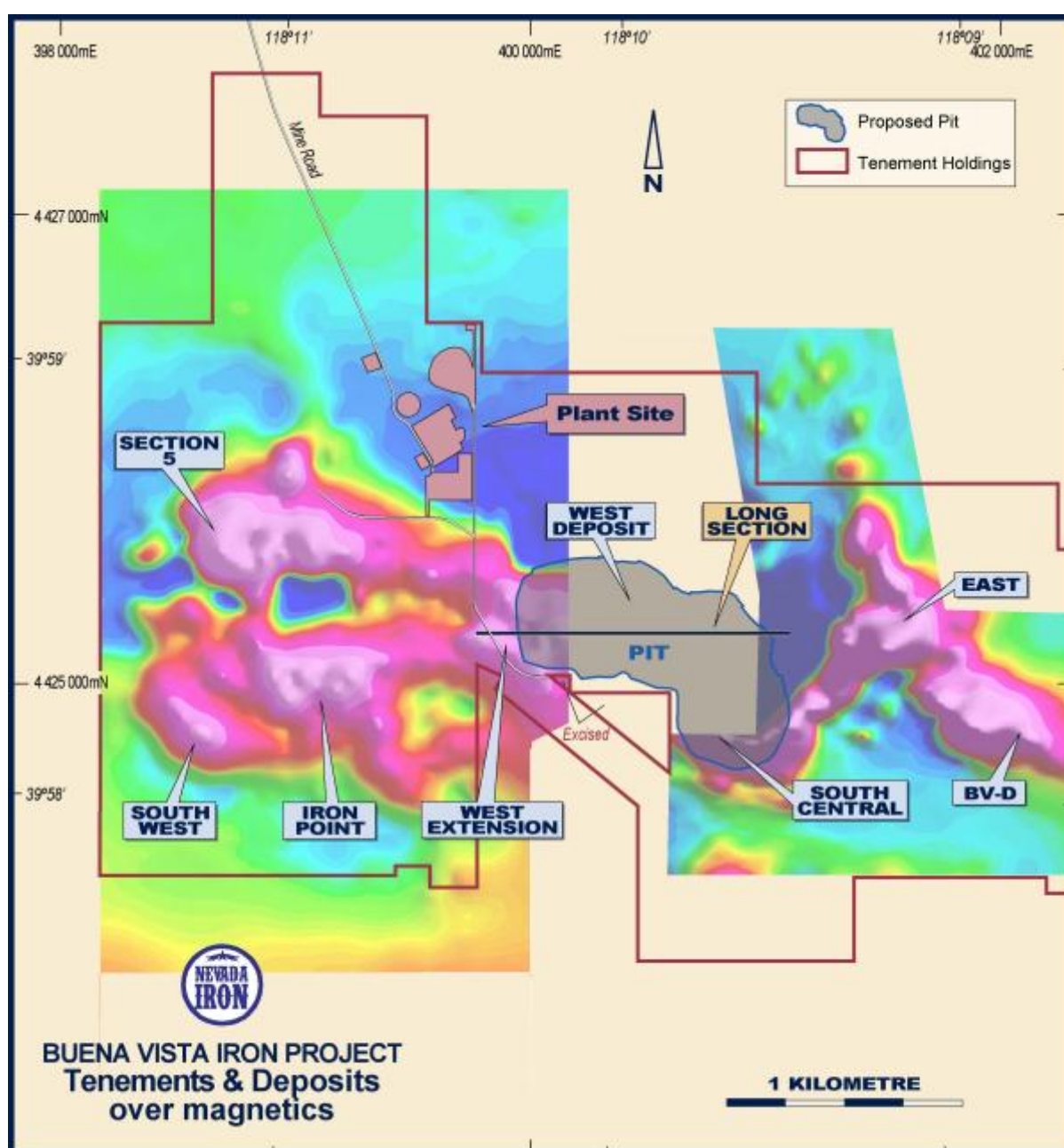
Seven holes were drilled to confirm historical data from the West and South Central deposits. Most of these twinned existing holes and had variable inclinations with a constant 188 degree azimuth. Core logging indicates that magnetite mineralisation is variable but there appears to be a good correlation with historical results.



Six sub-vertical holes were also drilled around the proposed open pit margins to provide geotechnical information. These were examined and logged in detail by geotechnical engineers.

Ground magnetic surveying over the majority of the project area has identified substantial new geophysical targets (refer Figure 2). This work indicates the West Deposit, that was the previous basis of the 59 Mt mineral reserve (Refer Table 5) for the feasibility study, is but one of many magnetic anomalies in the area and is potentially not the largest deposit on the project. Geophysical surveying over the West deposit is currently being finalised.

Figure 2: – Buena Vista Iron Project Ground Magnetic Survey



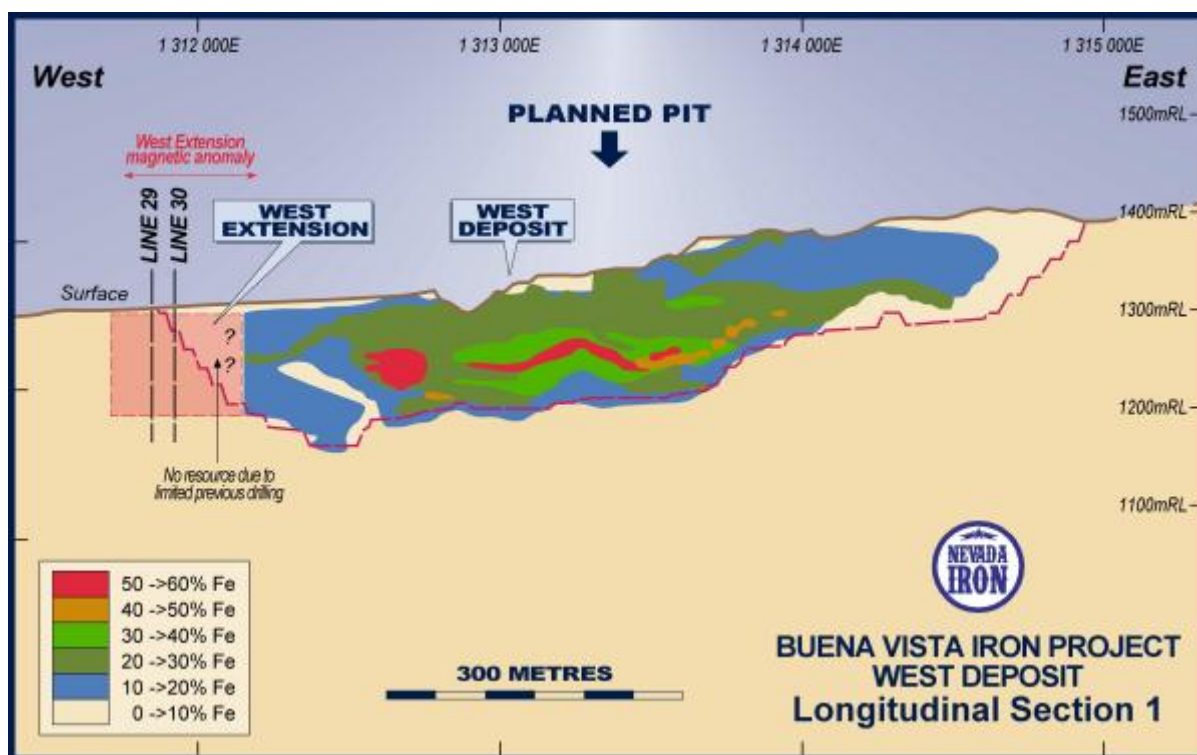


Several of the new anomalies are very large and extend off the current project tenure, with new applications by the Company to cover the extensions being processed at this time. The West Extension magnetic anomaly is located immediately to the west of the West Deposit. The West Deposit mineral resource (100.2 Mt @ 20.3% total Fe – Table 3) is terminated in the western end due to a lack of drill data.

As can be seen in the long section of the West Deposit in Figure 3, the magnetite mineralisation is extensive within the planned pit (resulting in a very low waste:ore ratio of 0.5:1) and terminates where the previous drilling ended. The new magnetic survey clearly indicates a magnetic anomaly that extends at least 300 m further west and recent drilling by the Company has intersected significant mineralisation in this area.

A total of 27 holes have been drilled at West Extension and the drilling shows magnetite mineralisation to extend to vertical depths of over 150 metres from surface.

Figure 3: – Long Section, West Deposit





The project's currently identified JORC Exploration Targets<sup>1</sup> provide for an additional 195 Mt to 268 Mt of exploration potential (Refer Table 4). Significant potential, therefore, exists to expand the scale of the project through additional exploration of, in particular, higher grade magnetite mineralisation at these prospects.

A large number of samples have been submitted for analysis and results are pending.

#### *Beneficiation Plant Design*

The Company is currently reviewing the engineering costs for the various mill combinations and comparing with the existing capital costs allowance for used and new mills.

#### *Concentrate Pipeline Design*

The Company's pipeline engineers in Reno have visited the site with a pipeline contractor to review the vertical and horizontal alignment for the pipeline and ascertain whether there are any constructability issues with building the pipeline. The engineer's have developed comparative costs for a variety of pipeline sizes which will be used in determining the optimal sizing when the mining and process aspects of the project have been finalised.

#### *Colado Rail Siding & Dewatering Facility*

A revised site layout has been developed to suit the revised pipeline route and also to provide storage capacity for approximately 25,000 wet tonnes of concentrate.

#### *Permitting*

As part of the Environmental Assessment of the project's linear infrastructure (bore field pipeline, concentrate pipeline and transmission power line), being prepared for the US Bureau of Land Management (BLM), the BLM requested that additional fauna and flora surveys be completed along the infrastructure routes.



The major permit focus for the quarter continued to be on the Water Pollution Control Permit (WPCP). Ore, waste rock and overburden samples were collected from various parts of the project area to enable testing to determine tails and waste rock disposal design criteria needed for the WPCP.

A comprehensive ground water monitoring plan is being finalised for the requirements and locations for monitoring wells, in support of groundwater characterisation needed for the WPCP.

Monitoring well design waivers were submitted to the Department of Water Resources and permission was received to install 4 monitoring wells. The wells are for groundwater monitoring to support the WPCP application and design of tailings disposal options.

### *Concentrate Transport*

The Company has three potential options for the provision of port and load out services, with two ports currently active as bulk terminals and a third proposing to develop a bulk terminal in the medium term. Discussions continue to be held with a view to securing the optimal service from a cost perspective and to ensure the Company has the potential to expand concentrate tonnages under a Phase 2 scenario.

Rail haulage of the concentrate will be along the main East-West rail line between Chicago and San Francisco that passes through the Company's planned rail siding at Colado. The Company is in the process of finalising rail rates with a major US railroad company.

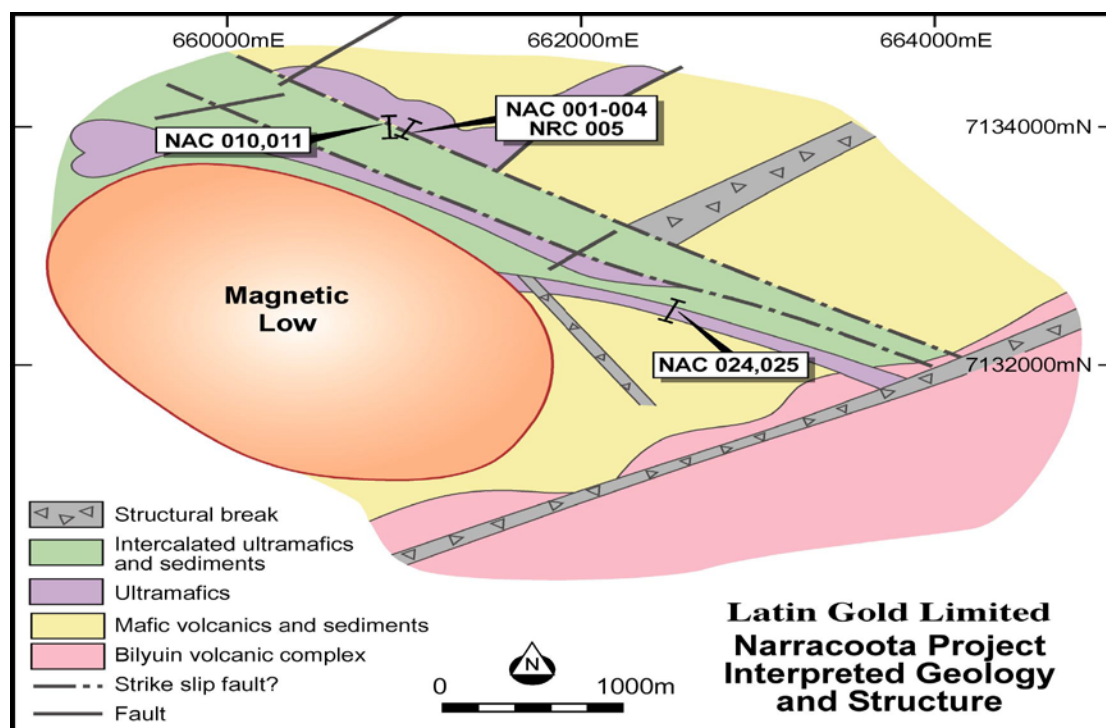
### **Narracoota (100% Nevada Iron – Latin Gold Limited earning 90%)**

The Narracoota project is located approximately 80 kilometres north of Meekatharra, Western Australia.

The project covers part of the southern section of the Palaeoproterozoic Bryah Basin (a sub-basin of the Glengarry Basin) and has been explored for epigenetic gold and VHMS-style base and precious metals by previous explorers.



The project area lies some 75 kilometres southwest of the DeGrussa discovery, which is hosted in rock units of the Narracoota Volcanics. The Narracoota project contains extensive widths of Narracoota Volcanics, which are interpreted to occur in at least three structural repetitions that provide a cumulative target zone of approximately 20 kilometres in length.



In early July 2012, Nevada Iron's JV partner; Latin Gold; undertook an air core drilling programme following up on previously intersected highly anomalous gold values (including 6 m grading 2.35 g/t Au from 17 m) in a prominent magnetic feature at Narracoota.

A total of 24 air core holes for 1,152 metres were completed in this programme. A total of 125 drill samples were collected and have been forwarded to SGS in Perth for analyses. Results are expected shortly.

Outcrop is very poor across the project area and all targets are below varying thicknesses of alluvial sediments.

The drilling intersected dolerites and possible ultramafics over the gold target, which lies in the north central part of the tenement area. Drilling over potential nickel targets in the



central part of the project area bottomed in volcanic fragmentals, which appear to have been largely derived from ultramafic lithologies.

Under the terms of the amended Narracoota joint venture, Latin Gold Limited has the right to earn a 90% interest in Narracoota by expending \$500,000. When that expenditure is achieved, Nevada Iron's interest in the project will revert to a 10% free carried interest through to completion of a feasibility study or the cumulative expenditure of \$2 million.

### **Loongana (Nevada Iron 100%)**

The Loongana project is located on the Nullarbor Plain within Western Australia and covers over 40 kilometres of a buried mafic and ultramafic intrusive. The intrusive had been interpreted from geophysical surveys and two historic drill holes, and six drill holes completed to date by Nevada Iron have confirmed the geology.

The Company is currently determining whether or not to withdraw from this project.

**Max Nind**

**Managing Director**

For further information on the Company visit [www.nv-iron.com](http://www.nv-iron.com)

### ***Competent Persons Statements***

*The information in this presentation that relates to, resources and resource potential is based on information compiled by Dr Vernon Stockmayer who is a Member of the Australian Institute of Geoscientists. Dr Stockmayer is an independent consultant to Nevada Iron Ltd. All other discussion is based on information compiled by Mr Max Nind; who is a Member of the Australian Institute of Geoscientists; and Mr Thomas Duckworth; who is a Fellow of both the Australasian Institute of Mining and Metallurgy and Institute of Materials, Minerals and Mining, London. Mr Nind, Managing Director, and Mr Duckworth, Director, are representatives of Nevada Iron Ltd. Dr Stockmayer, Mr Nind and Mr Duckworth have sufficient experience relevant to the style of mineralisation and type of deposit under consideration and to the activity to which they are undertaking to qualify as Competent persons as*



*defined in the 2004 Edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves". Dr Stockmayer, Mr Nind and Mr Duckworth consent to the inclusion in the report of the matters based on the information in the form and context in which it appears.*

*Sections of information contained within this report that relate to Ore Reserves are based on information compiled by Nigel Spicer who is a full-time employee of Minesure Pty Ltd and a Member of both the Australasian Institute of Mining and Metallurgy and Institute of Materials, Minerals and Mining, London. Nigel Spicer has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he has undertaken to qualify as a Competent Person as defined in the 2004 Edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves". Nigel Spicer consents to the inclusion in this report of the matters based on his information in the form and context in which it appears.*



Table 1: Section 5 - Southern Pacific Company Diamond Drill Results

Hole	Easting	Northing	From	To	Interval	Total Fe
SP 01	unknown	unknown	25.6 ft	470.0 ft	444.4 ft (135.5m)	33.2%
SP 02	611 250 ft	190 2830 ft	26.1 ft	120.0 ft	93.9 ft (28.6m)	18.2%
SP 03	611 500 ft	190 2775 ft	2.7 ft	460.0 ft	457.3 ft (139.4m)	29.9%
SP 04	611 375 ft	190 2810 ft	35.2 ft	470.0 ft	444.8 ft (135.6 m)	35.8%
SP 05	611 400 ft	190 2960 ft	30.5 ft	779.8 ft (EOH)	749.3 ft (228.4m)	23.8%
SP 06	611 180 ft	190 3040 ft	46.7 ft	210.0 ft	163.3 ft (49.8m)	33.4%
			245 ft	440.0 ft (EOH)	195.0 ft (59.4m)	32.6%
SP 07	611 290 ft	190 3070 ft	39.9 ft	560.0 ft (EOH)	520.1 ft (158.5m)	21.9%
SP 08	611 550 ft	190 3225 ft	50.0 ft	295.0 ft	245 ft (74.7m)	22.9%
SP 08			320.0 ft	530.0 ft	210 ft (64.0m)	21.8%
SP 09	611 600 ft	190 3750 ft	10.0 ft	140.0 ft	130.0 ft (39.6m)	20.3%
SP 10	611 750 ft	190 3800 ft	2.0 ft	374.0 ft	372.0 ft (113.4m)	20.0%
SP 11	611 100 ft	190 3440 ft	73.5 ft	301.2 ft	227.7 ft (69.4m)	24.6%
SP 13	611 510 ft	190 3415 ft	55.3 ft	140.0 ft	84.7 ft (25.8m)	25.3%
SP 13			175.0 ft	495.0 ft	320.0 ft (97.6m)	26.3%



SP 14	unknown	unknown	6.3 ft	100.0 ft	93.7 ft(28.6m)	17.5%
SP 14			120.0 ft	190.0 ft	70.0 ft (21.3m)	28.5%
SP 15	611 120 ft	190 2970 ft	49.6 ft	190.0 ft	140.4 ft (42.8m)	29.0%
SP 16	611 525 ft	190 2850 ft	9.0 ft	455.0 ft	446.0 ft(136.0m)	22.3%
SP 17	611 330 ft	190 2900 ft	50.0 ft	195.0 ft	145.0 ft (44.2m)	31.3%
			325 ft	500.0 ft (EOH)	175.0 ft (53.3m)	26.6%

Note: The large majority of the sample intervals were 5ft (1.5m). Drill holes were vertical diamond holes. A nominal cut-off of 15% total Fe has been used to determine the bulk intervals.

Table 2: RC Drill Hole 3C Results

N	E	Dip	Az	From (m)	To (m)	Interval (m)	Total Fe (%)
44258788	398565	-60°	188°	29.0	39.7	10.7	53.0
				39.7	61.0	21.3	21.0
				117.4	187.5	70.1	30.1

Table 3: – Mineral Resource Estimates at a 10% total Fe Cut off grade

Deposit	Category	Tonnes	Total Fe %	Contained Fe (Mt )
West	Indicated	100.2	20.3	20.3
South Central	Inferred	18.0	21.3	3.7
East	Inferred	19.0	21.5	4.0
<b>Total</b>		<b>137</b>	<b>20.4</b>	<b>28</b>



Table 4: – Exploration Targets <sup>1</sup>

Prospect	Tonnes	% Total Fe
Section 5	12-18,000,000	18-26
Iron Point	10-15,000,000	18-23
Southwest	12-15,000,000	20-25
BV-D	10-18,000,000	19-24
A5-1 Anomaly	80-110,000,000	15-20
A-10 Anomaly	70-90,000,000	15-20
Iron Horse	1-2,000,000	59-68
<b>Total</b>	<b>195-268,000,000</b>	<b>16-22</b>

*1. The potential quantity and grade of the exploration targets are conceptual in nature and there has been insufficient exploration to define a JORC compliant Mineral Resource and that it is uncertain if further exploration will result in the determination of a Mineral Resource.*

Table 5: – Mineral Reserve Estimate at a 9% total Fe Cut off grade

Deposit	Category	Tonnes	Total Fe %	Contained Fe (Mt)
West	Probable	59	21.7	12.8
<b>Total</b>	Probable	<b>59</b>	<b>21.7</b>	<b>12.8</b>